

## Cough suppressants for children

When asked to treat the cough of a child or adult, the first step is not to prescribe medicine but to determine the cause. Much the commonest cause of an acute cough in a child is a cold, with pharyngitis or tracheobronchitis or a postnasal discharge. The postnasal discharge is often the most annoying result of a cold. The child has little if any cough by day but coughs continually when he lies down at night to try to go to sleep. A postnasal discharge may also result from adenoids or an antrum infection. Most recurrent coughs, if not due to colds, are allergic in origin; some may be due to viral bronchitis.<sup>1</sup> An acute cough which repeatedly makes the child sick and is worse at night is probably a symptom of pertussis. An acute cough may result from an inhaled foreign body, and it is a mistake to assume that in such cases the coughing always has a sudden onset. The cough may be delayed until pneumonitis develops, or there may be only a wheeze, as in 106 of a series of 230 cases of inhaled foreign bodies.<sup>2</sup> A chronic or recurrent cough may be due to one or both parents smoking, for infants and children of parents who smoke experience more bronchitis and pneumonia than do children of non-smokers.<sup>3 4</sup> Again, a cough may be a habit or an attention-seeking device.

It is useless to prescribe antibiotics for a cough immediately after a cold or occurring during an attack of measles, because virus infections do not respond to antibiotics and antibiotics will not prevent bacterial complications of a cold or measles. Neither is it correct to prescribe an antibiotic for an apparent respiratory infection at the onset of an attack of asthma, for these infections are nearly always viral.<sup>5 6</sup>

As Gold<sup>7</sup> remarked, the fact that a patient has a cough does not indicate that he needs treatment for it. Enormous sums of money are wasted on cough medicines. In Britain in 1968<sup>8</sup> more than 8 million prescriptions were written for just seven linctus preparations at a cost of over £1 500 000. More recently some 75 million doses of linctus were prescribed in this country in one year. Many more millions of doses are bought in the chemists' shops without prescription. But in most cases of acute cough no medicine is needed. The doctor should explain to the parent that the cough serves a useful purpose in clearing the air passages, so that it is unwise to suppress it. The cough is a necessary evil.

When cough is due to a postnasal discharge a child may be helped to get sleep by encouraging him to lie prone. Occasionally a dose of chloral may be indicated to promote sleep. Antihistamines are commonly given. Theoretically they may do harm by drying the secretions; any good which they do is probably due to their soporific action. If any medicine is given for an acute cough it should at least be safe and cheap, for it is unlikely to achieve anything. As Wade<sup>9</sup> wrote, the use of cough medicines and linctus preparations is hallowed by tradition and their action is mainly that of a placebo. Prescribing a cough suppressant for a child is hardly ever correct, as children's coughs are nearly always productive. For the rare dry, tickling cough, in which there is apparently nothing to cough up, codeine linctus is as good as anything, and claims that other drugs such as pholcodine, noscapine, or dextromethorphan are better than codeine remain unproved.<sup>10 11</sup> Codeine may cause constipation, and drug dependence may develop if its use is continued. Morphine should never be given for the treatment of asthma. A recent double-blind crossover study showed that diphenhydramine reduced the frequency of cough

in adults.<sup>12</sup> But the prescription of a cough suppressant for a child should be rare indeed.

A doctor may sometimes try to ease a patient's cough by an expectorant, prescribing an iodide or a mucolytic agent such as bromhexine. Though bromhexine may liquefy thick secretions in vitro, there is little evidence that it helps man.<sup>13 14</sup> Iodides are of doubtful value, and their prolonged use may lead to a goitre. The evidence that any expectorant is of value in man is indeed tenuous. The practice of combining an expectorant with a sedative is absurd<sup>15</sup> and reflects the lack of evidence that the ingredients have any pharmacological action.

<sup>1</sup> Williams, H E, *Australian Paediatric Journal*, 1975, **11**, 1.

<sup>2</sup> Pyman, C, *Medical Journal of Australia*, 1971, **1**, 62.

<sup>3</sup> Colley, J R T, Holland, W W, and Corkhill, R T, *Lancet*, 1974, **2**, 1031.

<sup>4</sup> Harlap, S, Davies, A M, *Lancet*, 1974, **1**, 529.

<sup>5</sup> McIntosh, K, et al, *Journal of Pediatrics*, 1973, **82**, 578.

<sup>6</sup> Lambert, H P, and Stern, H, *British Medical Journal*, 1972, **3**, 323.

<sup>7</sup> Gold, H, *American Journal of Medicine*, 1953, **14**, 87.

<sup>8</sup> Illingworth, R S, *The Treatment of the Child at Home. A Guide for Family Doctors*. Oxford, Blackwell, 1971.

<sup>9</sup> Wade, O L, *Prescribers' Journal*, 1961, **1**, 40.

<sup>10</sup> *British Medical Journal*, 1971, **2**, 581.

<sup>11</sup> *Drug and Therapeutics Bulletin*, 1965, **3**, 47.

<sup>12</sup> Lilienfeld, L S, Rose, J C, and Princiotta, J V, *Clinical Pharmacology and Therapeutics*, 1976, **19**, 421.

<sup>13</sup> *Drug and Therapeutics Bulletin*, 1969, **7**, 89.

<sup>14</sup> *Drug and Therapeutics Bulletin*, 1971, **9**, 91.

<sup>15</sup> Graham, J D P, *Practitioner*, 1959, **183**, 344.

## Hypospadias

Figures for the incidence of hypospadias vary from 1 in 620<sup>1</sup> to 1 in 250 live births.<sup>2</sup> These take into account all its forms, from a coronal orifice with little associated deformity other than the hooded prepuce to the bifid scrotum with a perineal meatus in which the sex identity may be in question.

When the external urinary meatus is situated in the perineum, an extensive correction will be necessary; if it is on the shaft of the penis, then the chordee, or downward bowing, of the penis must be corrected, and a skin inlay by one of the many procedures described must be constructed. The skin of the preputial hood should be used, as this does not have hair. Scrotal or perineal skin is apt to form a hairball, on which phosphatic encrustation may deposit. An orifice situated at the corona may not require surgical intervention provided there is no obvious chordee, no meatal stenosis, and no gross rotational deformity of the glans.<sup>3</sup>

Chordee is due to failure of development of the distal urethra, though occasionally it may result from shortening of the developed part of the urethra ("the short urethra").<sup>4</sup> About 90% of fetuses show it in some degree between the sixteenth and twentieth week of gestation.<sup>5</sup> The chordee must be assessed and corrected by excision of the fibrous plaque of undeveloped urethra between the external urinary meatus and the glans. An orifice which before correction is situated almost on the corona may after correction come to lie near the mid-point of the shaft of the penis. Adequate excision is achieved only by over-correction of the chordee. Occasionally a very large and redundant preputial hood may exaggerate the appearance of a chordee, in which case, if the penis is held by this hood in the erect position, a normal length of the ventral aspect may be found.

Meatal stenosis is occasionally reported by an observant mother, who has noticed the urethra ballooning proximal to the orifice. To assess the meatus a pinch of penile skin should